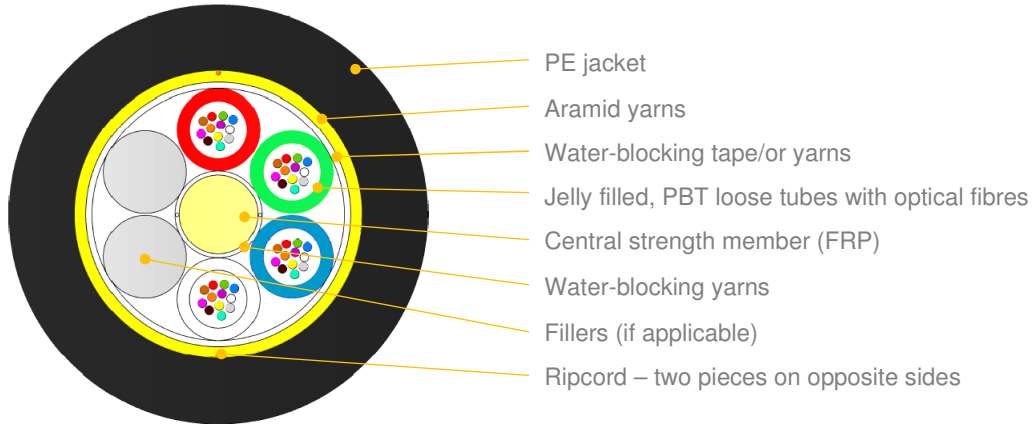


## Single jacket, self-supporting aerial cable with aramid yarns reinforcement AERO-AS02L



\*schematic drawing, not to scale

### APPLICATION

Self-supporting aerial cable  
Installation on poles or in ducts  
For installation along power lines with an operation voltage below 150 kV and producing space potential below 4 kV.  
Fully dielectric

### DESIGN

Highly resistant, UV stabilized PE outer jacket  
Aramid yarns reinforcement  
SZ stranded cable core  
FRP central rod  
Jelly filled, PBT loose tubes with optical fibres  
Dry cable core - water-blocking tape and/or yarns  
Ripcord – two pieces on opposite sides

### VARIANTS

Variant	Quantity [pcs]				Ø nominal (±5%) [mm]	Nominal weight (±10%) [kg/km]	Max allowed tension T <sub>M</sub> [N]	Max static tension T <sub>L</sub> [N]
	Fibres	Fibres per tube	Total elements	Tube diameter				
1-6T x 12F	12-72	12	6	2,1	9,9	77	2000	1300

### TECHNICAL AND ENVIRONMENTAL CABLE CHARACTERISTICS

Test	Standard	Conditions	Requirements
Tensile strength	IEC60794-1-21 Method E1	Short term - T <sub>M</sub> : 2000	Fibre strain: ≤0,6%, Δα reversible
		Long term - T <sub>L</sub> : 1300	Fibre strain: ≤0,2%, Δα≤0,05 dB/km
Crush resistance	IEC60794-1-21 Method E3	Long term: 2000N / 10cm / 15min	Δα≤0,05 dB, during test
Impact resistance	IEC60794-1-21 Method E4	Impact energy: 10J Radius: 300 mm No. of impacts: 3 ( 500mm apart)	Δα≤0,1dB, reversible No jacket cracking and fibre breakage
Repeated bending	IEC60794-1-21 Method E6	Radius: 20xD No. of cycles: 35	Δα≤0,1dB, reversible No jacket cracking and fibre breakage
Torsion	IEC60794-1-21 Method E7	Cable length: 2m No. of cycles: 10 Twist angle: ± 180°	Δα≤0,1dB, reversible No jacket cracking and fibre breakage
Bending	IEC60794-1-21 Method E11	Radius: 20xD No. of turns: 4	Δα≤0,05dB No jacket cracking and fibre breakage
Temperature range	IEC60794-1-22 Method F1	Installation: -15... +55 [°C]	Δα≤0,05 dB/km
		Operation: -40... +70 [°C]	
		Transport & Storage: -40... +70 [°C]	
Water Penetration	IEC60794-1-22 Method F5B	Water head: 1m, Time: 24h, Length: 3m	No water leakage

(\*) values for single-mode fibres, all optical measurements performed at 1550nm

Type:	AERO-AS02L	REV: 0
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### SPAN CHARACTERISTIC

Loading Conditions	Span	Installed Sag (2%)	Tension	Total sag	Horizontal sag	Vertical sag
	[m]	[m]	[N]	[m]	[m]	[m]
NSC Light	140	2,8	2000	6,3	6,1	1,8
NSC Medium	95	1,9	2000	4,6	2,9	3,6
NSC Heavy	50	1,0	2000	2,5	1,3	2,1

### OPTICAL FIBRE AND LOOSE TUBES COLOUR IDENTIFICATION

For optical fibres and loose tube identification information please see DSH\_Colors\_CODE\_XXXX document.

### FIBRE PARAMETERS

For selected post-production optical fibres parameters please see DSH\_OFP document.

### MARKING

The following print (laser printer) is applied at 1-meter intervals:

Example: FIBRAIN AERO-AS02L T21 12F SM G657A1 1T12F "YEAR OF MANUFACTURE" "LASER SYMBOL" "LENGTH MARKING" "BATCH NUMBER"

The accuracy of marking is  $\pm 0,5\%$ . Remarking is in accordance with Bellcore GR 20 and supersedes earlier markings. Occasional loss of marking is possible. Cables can be supplied with a range of single mode or multimode fibres and customized print.

### PACKING

Cables will be shipped on disposable wooden or treated wooden drums. Both ends of the cable will be capped and accessible for testing. Rotation direction arrow will be marked on the drum together with identification information.

### DELIVERY LENGTH

2000 – 8000 meters  $\pm 5\%$ , with possibility of supplying up to 5% of total contract quantity as short length cables which should be above 1000 meters long. Tolerance of 5 % of order quantity shall be allowed.

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